We claim:

1.   A time-slicing digital broadcasting transmitter system comprising:

a buffer that receives information from an information service provider;

an encapsulator that receives buffered information from the buffer and that forms at least one packet header that contains time-slice information that includes a time-slice parameter specifying a relationship between a current packet of a current burst of packets and a subsequent burst of packets; and

a digital broadcast transmitter that transmits bursts of packets that include the time-slice information.

2.   The time-slicing digital broadcasting transmitter system of claim 1, wherein the time-slice information specifies an amount of time that elapses between transmission of the current packet and transmission of a first-transmitted packet of the subsequent burst of packets.

3.   The time-slicing digital broadcasting transmitter system of claim 1, wherein the time-slice information specifies a time-slice duration for transmitting the current burst of packets.

4.   The time-slicing digital broadcasting transmitter system of claim 1, wherein the time-slice information includes a time-slice index for numbering originally transmitted bursts of packets.

5.   The time-slicing digital broadcasting transmitter system of claim 1, wherein the buffer is substantially large enough to store at least two full bursts of data from the information service provider and any data to be transmitted between transmission of the two full bursts of data.

6.   The time-slicing digital broadcasting transmitter system of claim 5, wherein the amount of time that elapses between transmitting the current packet and transmitting the

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first-transmitted packet of the subsequent burst is determined based at least in part upon how many packets will be transmitted between transmitting the current packet and transmitting the subsequent packet.

7.   The time-slicing digital broadcasting transmitter system of claim 2, wherein the amount of time that elapses between transmitting the current packet and transmitting the first-transmitted packet of the subsequent burst is determined based at least in part upon an amount of transmitter-idle time between transmission bursts.

8.   The time-slicing digital broadcasting transmitter system of claim 1, wherein the buffer comprises a buffer selected from the group consisting of: an elastic buffer, a first-in, first-out (FIFO) buffer, a ring buffer, and a dual buffer having separate input and output sections.

9.   The time-slicing digital broadcasting transmitter system of claim 1, wherein the encapsulator places the time-slice information into lower layer protocol packet header bits.

10.   The time-slicing digital broadcasting transmitter system of claim 9, wherein the lower layer protocol is DVB DSM-CC section protocol.

11.   The time-slicing digital broadcasting transmitter system of claim 10, wherein the time-slice information is placed into at least one byte reserved, but not used, for media access control addressing.

12.   The time-slicing digital broadcasting transmitter system of claim 1, wherein the time-slice information includes a down-counting packet index for a plurality of packets within the current burst of packets.

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13.   The time-slicing digital broadcasting transmitter system of claim 1, wherein the time-slice information includes a time slice boundary indication that indicates whether the current packet is a first-transmitted packet of the current burst of packets.

14.   A mobile terminal that receives time-slicing digital broadcast information, the mobile terminal comprising:

a digital broadcast receiver that receives bursts of packets that include time-slice information and that have been transmitted by a digital broadcast transmitter;

a buffer that receives time slice information; and

an application processor that receives buffered time-slice information from the buffer and that decodes the buffered time-slice information thereby extracting information that specifies a relationship between a current packet of a current burst of packets and a subsequent burst of packets.

15.   The mobile terminal of claim 14, wherein the time-slice information includes a down-counting packet index for a plurality of packets within the current burst of packets.

16.   The mobile terminal of claim 15, wherein the time-slice information includes a time slice boundary indication that indicates whether the current packet is a first-transmitted packet of the current burst of packets.

17.   The mobile terminal of claim 14, wherein the time-slice information includes an up-counting packet index for a plurality of packets within the current burst of packets.

18.   The mobile terminal of claim 17, wherein the time-slice information includes a time slice boundary indication that indicates whether the current packet is a last-transmitted packet of the current burst of packets.

19.   The mobile terminal of claim 14, wherein the time-slice information includes a next burst indication that indicates whether the subsequent burst of packets is an original burst or a copy burst.

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20.   The mobile terminal of claim 14, wherein the time-slice information includes an indication of an amount of time between receiving the current packet and a first-received packet of the subsequent burst of packets.

21.   The mobile terminal of claim 14, wherein the time-slice information is decoded from lower layer protocol packet header bits.

22.   The mobile terminal of claim 21, wherein the lower layer protocol is DVB DSM-CC section protocol.

23.   The mobile terminal of claim 22, wherein the time-slice information is decoded from at least one byte reserved, but not used, for media access control addressing.

24.   A time-slicing digital broadcasting system comprising:
a digital broadcast transmitter system that transmits bursts of packets that include information from at least one data service of at least one information service provider and that include time-slice information that specifies a relationship between a current packet of a current burst of packets and a subsequent burst of packets; and
a digital broadcast receiver system that receives the bursts of packets and that decodes the time-slice information thereby extracting information that specifies the relationship between the current packet and the subsequent burst of packets.

25.   The time-slicing digital broadcasting system of claim 24, wherein the time-slice information includes an indication of an amount of time between transmitting the current packet and a first-transmitted packet of the subsequent burst of packets.

26.   The time-slicing digital broadcasting system of claim 25, wherein the subsequent burst of packets is a copy of the current burst of packets.

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27.   The time-slicing digital broadcasting system of claim 24, wherein the transmitter comprises an encapsulator that places the time-slice information into lower layer protocol packet header bits.

28.   The time-slicing digital broadcasting system of claim 27, wherein the lower layer protocol is DVB DSM-CC section protocol.

29.   The time-slicing digital broadcasting system of claim 28, wherein the time-slice information is placed into at least one byte reserved, but not used, for media access control addressing.

30.   A method of transmitting time-slicing digital broadcast information, the method comprising:

buffering information received from at least information service provider; and

forming packets including the buffered information and packet headers that contain time-slice information that specifies a plurality of relationships between a plurality of packets of a current burst of packets and a subsequent burst of packets.

31.   The method of claim 30, wherein the time-slice information specifies a plurality of different amounts of time between transmitting a plurality of packets of the current burst and transmitting a first-transmitted packet of the subsequent burst.

32.   The method of claim 30, wherein the time-slice information specifies a plurality of different packet indexes for a plurality of packets of the current burst.

33.   The method of claim 30, wherein the time-slice information specifies whether the subsequent burst is a copy of the current burst.

34.   The method of claim 30, wherein the time-slice information specifies a duration of the current burst.

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35.   The method of claim 30, wherein the time-slice information is placed into lower layer protocol packet header bits.

36.   The method of claim 35, wherein the lower layer protocol is DVB DSM-CC section protocol.

37.   The method of claim 36, wherein the time-slice information is placed into at least one byte reserved, but not used, for media access control addressing.

38.   A method of receiving time-slicing digital broadcast information, the method comprising:

receiving bursts of packets that include time-slice information and that have been transmitted by a digital broadcast transmitter, wherein the time-slice information specifies a relationship between a current packet of a current burst of packets and a subsequent burst of packets;

buffering the time-slice information; and

decoding the buffered time-slice information to extract information that specifies the relationship between the current packet and the subsequent burst of packets.

39.   The method of claim 38, wherein the time-slice information specifies an amount of time between transmitting the current packet and transmitting the first-transmitted packet of the subsequent burst.

40.   The method of claim 38, wherein the time-slice information is decoded from lower layer protocol packet header bits.

41.   The method of claim 40, wherein the lower layer protocol is DVB DSM-CC section protocol.

42.   The method of claim 41, wherein the time-slice information is decoded from at least one byte that is reserved, but not used, for media access control addressing.

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43.   A computer-readable medium containing computer-executable instructions for transmitting time-slicing digital broadcast information by performing the steps recited in claim 30.

44.   A computer-readable medium containing computer-executable instructions for transmitting time-slicing digital broadcast information by performing the steps recited in claim 31.

45.   A computer-readable medium containing computer-executable instructions for transmitting time-slicing digital broadcast information by performing the steps recited in claim 35.

46.   A computer-readable medium containing computer-executable instructions for transmitting time-slicing digital broadcast information by performing the steps recited in claim 36.

47.   A computer-readable medium containing computer-executable instructions for transmitting time-slicing digital broadcast information by performing the steps recited in claim 37.

48.   A computer-readable medium containing computer-executable instructions for receiving time-slicing digital broadcast information by performing the steps recited in claim 39.

49.   A computer-readable medium containing computer-executable instructions for receiving time-slicing digital broadcast information by performing the steps recited in claim 40.

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50.   A computer-readable medium containing computer-executable instructions for receiving time-slicing digital broadcast information by performing the steps recited in claim 41.

51.   A computer-readable medium containing computer-executable instructions for receiving time-slicing digital broadcast information by performing the steps recited in claim 42.

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